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COMPLETE LISTING OF THE CLAIMS

- 1. (Currently Amended): A system that facilitates communicating between managed and unmanaged code, comprising:
- a first component that is one of the managed and unmanaged code; and a caller associated with the first component, the caller invoking having code that invokes an object related to a second component, the second component being one of the managed and unmanaged code, the caller's code including an in-lined stub that facilitates communications between the objects.
- 2. (Original): The system of claim 1, the in-lined stub including a call and return pair to facilitate communications between the objects.
- 3. (Original): The system of claim 1, further comprising a stack marker that is hoisted from within a code loop associated with the caller to facilitate code execution performance during communications between the objects.
- 4. (Original): The system of claim 1, the caller further comprising transition code to synchronize execution between the objects.
- 5. (Original): The system of claim 1, the caller further comprising one or more flags to synchronize execution between the objects.
- 6. (Original): The system of claim 5, the one or more flags utilized to synchronize code execution with a garbage collector.
- 7. (Original): The system of claim 6, the one or more flags utilized to suspend return operations from the unmanaged code until operations associated with the garbage collector have completed.

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- 8. (Original): The system of claim 1, the caller further comprising security attribute code to insulate the objects from at least one of code and security implementation details.
- 9. (Original): The system of claim 1, the caller further comprising calling convention code to at least one of organize arguments and an execution stack according to the convention of the unmanaged code.
- 10. (Original): The system of claim 9, the calling convention code utilized to interpret one or more return values from the unmanaged code.
- 11. (Original): The system of claim 1, the caller including at least one of an in-lined marshalling code and an external marshalling code to transfer data between the objects.
- 12. (Original): The system of claim 1, the caller further comprising an extensibility component to facilitate generalized communications between the objects.
 - 13. (Original): The system of claim 12, the extensibility component including a function pointer that includes one or more functions as arguments.
 - 14. (Currently Amended): A method to facilitate communications between managed and unmanaged code, comprising:

incorporating external stub code functionality within <u>code of</u> a calling function; and

providing a call and return within the ealler calling code to facilitate communications between the managed and unmanaged code.

15. (Original): The method of claim 14, further comprising hoisting a marker from a loop associated with the caller to facilitate code execution performance during communications between the managed and unmanaged code.

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- 16. (Original): The method of claim 14, further comprising synchronizing execution between the managed and unmanaged code.
- 17. (Original): The method of claim 16, further comprising synchronizing code execution with a garbage collector.
- 18. (Original): The method of claim 17, further comprising suspending operations from the unmanaged code until operations associated with the garbage collector have completed.
- 19. (Original): The method of claim 14, further comprising utilizing security attributes to insulate the managed and unmanaged code from at least one of code and security implementation details.
- 20. (Original): The method of claim 14, further comprising at least one of organizing arguments and an execution stack according to the format of the unmanaged code.
- 21. (Original): The method of claim 14, transferring data between the managed and unmanaged code *via* at least one of an in-lined marshalling code and an external marshalling code.
- 22. (Original): The method of claim 14, further comprising generalizing a function to facilitate communications between the managed and unmanaged code.
- 23. (Original): The method of claim 22, further comprising utilizing a function pointer that points to one or more functions as arguments to facilitate communications between the managed and unmanaged code.
- 24. (Original): A computer-readable medium having computer-executable instructions for performing the acts of claim 14.

25. (Currently Amended): A system to facilitate communications between disparate objects, comprising:

means for incorporating external stub code functionality within code of a caller; and

means for interfacing with the caller to facilitate communications between the disparate objects.

- 26. (Previously Presented): The system of claim 25, further comprising means for hoisting a marker from a loop associated with the caller to facilitate code execution performance during communications between the disparate objects.
- 27. (Currently Amended): A computer-readable medium having stored thereon, a caller <u>having code that incorporates an in-lined stub</u> to execute a remote object, comprising:
 - a first data set providing call and return interface capabilities within the caller; a second data set providing execution stack instructions for the caller; and a third data set providing hoisting capabilities within the caller, the interface, the
- 28. (Currently Amended): A signal to communicate between managed and unmanaged code, comprising:
- a signal to communicate data between the managed and unmanaged code; and a caller associated with the managed code, the caller invoking having code that invokes an object related to the unmanaged code via the signal, the caller's code including an in-lined stub that facilitates communications between the managed and the unmanaged code.

stack instructions and the hoisting capabilities enabling execution of the remote object.

- 29. (New): A system that facilitates communication, the system comprising:

 a caller component that is associated to a first component, the first component
 being one of managed and unmanaged code;
- a second component that is invoked by code associated with the caller component, the second component is the other one of the managed and unmanaged code, the code includes an in-lined stub that facilitates communication between the components.
- 30. (New): The system of claim 29, the in-lined stub having a call and return pair that facilitates the communication.
- 31. (New): The system of claim 29, further comprising a code loop associated with the caller that hoists a stack marker that facilitates code execution performance during the communication.
- 32. (New): A method to facilitate communications between managed and unmanaged code, the method comprising:

embedding an in-lined stub code within code of a calling function; and incorporating a call and return within the calling code to facilitate communications between the managed and unmanaged code.

- 33. (New): The method of claim 32, further comprising hoisting a marker from a loop, the marker facilitates code execution performance during communications between managed and unmanaged code.
- 34. (New): The method of claim 32, further comprising synchronizing execution between the managed and unmanaged code.
- 35. (New): The method of claim 32, further comprising transmitting data between the managed and unmanaged code *via* at least one of an in-lined marshalling code and an external marshalling code.

36. (New): A system to facilitate communications between disparate objects, the system comprising:

means for incorporating an in-lined stub within code of a caller; and means for providing a call and return within the caller to facilitate communication between the disparate objects.

- 37 (New): The system of claim 36, further comprising means for hoisting a marker from a loop associated with the caller to facilitate execution performance during communications between the disparate objects.
- 38. (New): The system of claim 36, further comprising means for synchronizing execution between the disparate objects.
- 39. (New): The system of claim 36, further comprising means for insulating the disparate objects from at least one of code and security implementation details.
- 40. (New): The system of claim 36, further comprising means for suspending return operations from one of the disparate objects associated with unmanaged code until operations associated with a garbage collector have completed.